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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,611	02/27/2004	Jon Washington	D-1207	9212
28995	7590	12/20/2004	EXAMINER	
RALPH E. JOCKE 231 SOUTH BROADWAY MEDINA, OH 44256			PAIK, STEVE S	
			ART UNIT	PAPER NUMBER
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DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/788,611	Applicant(s) WASHINGTON ET AL	
	Examiner Steven S. Paik	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 45-94 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 45-87, 89, 90 and 92-94 is/are rejected.
- 7) ☒ Claim(s) 88 and 91 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed February 27, 2004. The amendment includes cancelled claims 2-44 and newly added claims 45-94.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 45, 47-54, 58-61, 66-68, 77, 78, 80-86, 89, and 92-94 are rejected under 35 U.S.C. 102(e) as being anticipated by Shepherd et al. (US 6,402,025).

Re claim 1, Shepherd et al. disclose an apparatus including:

a cassette (a valuable media container (100));

wherein the cassette is adapted for use in an automated banking machine (col. 1, ll. 4-21),

wherein the cassette is operative to hold media (currency) therein,

wherein the cassette includes at least one indicator member (barcode 113),

wherein the at least one indicator member (barcode 113) includes data (typically the barcode would contain information such as the type of notes in the container and the number of notes in the container 100) therewith regarding the cassette,

wherein the data is operative to be read by an automated banking machine (col. 4, ll. 6-13),

Art Unit: 2876

wherein the data is operative to be read without requiring physical contact between the indicator member and a component of the machine (col. 2, ll. 20-26 and col. 4, ll. 19-24).

Re claim 45, Shepherd et al. disclose the apparatus as recited in rejected claim 1 stated above, wherein the data is representative of cassette identifying information (col. 4, ll. 6-14).

Re claim 47, Shepherd et al. disclose the apparatus as recited in rejected claim 1 stated above, wherein the data is representative of cassette content information (col. 4, ll. 6-14).

Re claim 48, Shepherd et al. disclose the apparatus as recited in rejected claim 47 stated above, wherein the cassette content information pertains to at least one media characteristic (col. 4, ll. 6-14).

Re claim 49 Shepherd et al. disclose the apparatus as recited in rejected claim 48 stated above, wherein the media comprises currency, and wherein the cassette content information pertains to at least one currency characteristic (col. 4, ll. 6-14).

Re claim 50 Shepherd et al. disclose the apparatus as recited in rejected claim 49 stated above, wherein the at least one currency characteristic relates to currency nationality, currency denomination, currency length, currency height, currency thickness, currency code, amount of currency loaded in the cassette, time the cassette was loaded with currency, date the cassette was loaded with currency, identifying information pertaining to the currency loading entity, or any combination thereof (col. 4, ll. 6-14).

Re claim 51 Shepherd et al. disclose the apparatus as recited in rejected claim 1 stated above, wherein the indicator member comprises a non-contact transponder (electronic tag) operative to communicate with an automated banking machine (col. 2, ll. 20-26).

Re claim 52 Shepherd et al. disclose the apparatus as recited in rejected claim 1 stated

Art Unit: 2876

above, wherein the indicator member comprises a radio frequency identification (RFID) tag (col. 2, ll. 20-26; an RFID tag can be anticipated by an electronic tag of Shepherd et al.).

Re claim 53 Shepherd et al. disclose the apparatus as recited in rejected claim 52 stated above, wherein the tag is embedded in the cassette (col. 2, ll. 20-26; an RFID tag can be anticipated by an electronic tag of Shepherd et al. The barcode or tag is embedded in each cassette).

Re claim 54 Shepherd et al. disclose the apparatus as recited in rejected claim 52 stated above, wherein the tag is removably attached to the cassette (The barcode 113 or suggested electronic tag is not permanently attached to the cassette).

Re claim 58 Shepherd et al. disclose the apparatus as recited in rejected claim 52 stated above, wherein the apparatus further includes an automated banking machine (col. 1, ll. 4-21).

Re claim 59 Shepherd et al. disclose the apparatus as recited in rejected claim 58 stated above, wherein the automated banking machine comprises an ATM (col. 1, ll. 4-21).

Re claim 60 Shepherd et al. disclose the apparatus as recited in rejected claim 59 stated above, wherein the ATM includes the cassette therein (col. 43, ll. 6-7).

Re claim 61 Shepherd et al. disclose the apparatus as recited in rejected claim 60 stated above, wherein the ATM includes a tag reader with circuitry operative to interrogate the tag to receive information about the cassette from the tag (Shepherd et al. discloses a barcode being read automatically upon loading the container into the ATM. Shepherd et al. further disclose an electronic tag as another example of machine readable identifier. In a situation where an electronic tag is employed, then it is inherent that the machine which reads the machine readable identifier would be a tag reader.).

Art Unit: 2876

Re claim 66, Shepherd et al. disclose an apparatus including:

a cassette (a valuable media container (100));

wherein the cassette includes currency (currency),

wherein the cassette includes at least one radio frequency identification (RFID) tag

(col. 2, ll. 21-26),

wherein the at least one tag includes data (typically the barcode would contain

information such as the type of notes in the container and the number of notes in the container

100) representative of characteristics of the currency,

an automated banking machine (col. 1, ll. 4-21),

wherein the an automated banking machine (col. 4, ll. 6-13) comprises a dispenser feed channel (col. 4, ll. 31-58),

wherein the dispenser feed channel includes a cassette reader (barcode or tag reader),

wherein the reader is operative to remotely read the tag data (col. 2, ll. 20-26 and col. 4, ll. 19-24).

Re claim 67, Shepherd et al. discloses the apparatus as recited in rejected claim 66 stated above, wherein the reader is operative to read the tag data while the tag is in physically contactless relationship with the machine (Fig. 2A-2B show that there is no physical connection between the machine readable identifier (barcode or an electronic tag) and the ATM).

Re claim 68, Shepherd et al. discloses the apparatus as recited in rejected claim 67 stated above, wherein the reader is spaced from the tag (Fig. 2A-2B show that there is no physical connection between the machine readable identifier (barcode or an electronic tag) and the ATM).

Method claim 77 is essentially the same in scope as apparatus claim 66 and is rejected similarly.

Method claim 78 is essentially the same in scope as apparatus claim 66 and is rejected similarly.

Re claim 80, Shepherd et al. disclose an apparatus including:
an automated banking machine cassette (100),
wherein the cassette is operative to hold media (currency) therein,
wherein the cassette includes at least one indicator member (barcode or an electronic tag),
wherein the at least one indicator member is operative to provide information representative of a characteristic of the cassette (col. 4, ll. 6-14),
wherein the information is operative to be remotely accessed by a disposed component of an automated banking machine (barcode data is remotely accessed by a barcode reader without a physical contact).

Re claim 81, Shepherd et al. disclose the apparatus as recited in rejected claim 80 stated above, wherein the indicator member is operative to provide information representative of cassette content (col. 4, ll. 6-14).

Re claim 82, Shepherd et al. disclose the apparatus as recited in rejected claim 81 stated above, wherein the cassette contains media therein, wherein the indicator member is operative to provide information representative of a characteristic of the cassette media (col. 4, ll. 6-14).

Re claim 83, Shepherd et al. disclose the apparatus as recited in rejected claim 82 stated above, wherein the indicator member comprises a target (a barcode has an area that needs to be scanned to convey information encoded therein).

Art Unit: 2876

Re claim 84, Shepherd et al. disclose the apparatus as recited in rejected claim 83 stated above, wherein the target is operative to provide information representative of a cassette position in a machine (a barcode has an area that needs to be scanned to convey information encoded therein).

Re claim 85, Shepherd et al. disclose the apparatus as recited in rejected claim 84 stated above, wherein the apparatus further includes an automated banking machine, wherein the machine has the cassette therein (col. 4, ll. 6-58).

Re claims 86 and 89, Shepherd et al. disclose the apparatus as recited in rejected claim 85 stated above, wherein the automated banking machine comprises a distance determining device (a barcode reader or an electronic tag reader inherently including a reading range), wherein the determining device is operative to determine the distance between the target and a component of the automated banking machine.

Method claim 92 is essentially the same in scope as apparatus claim 80 and is rejected similarly.

Method claim 93 is essentially the same in scope as apparatus claim 86 and is rejected similarly.

Method claim 94 is essentially the same in scope as apparatus claim 86 and is rejected similarly.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2876

5. Claims 46, 55-57, 62-65, 69-71, 79, 87, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al. (US 6,402,025) in view of Tamada et al. (US 4,822,990).

Re claims 46, 55-57, 62-65, 69-71, 87, and 90, Shepherd discloses a dispensing container for storing valuable media and a self-service terminal (such as an ATM) for using these dispensing containers. The ATM incorporates a housing for storing these containers and a reader to read a machine readable identifier for keeping the characteristics of the media stored in the dispensing container. Shepherd et al. further disclose the machine readable identifier may be a barcode or an electronic tag.

Although it is well known an RFID tag is a kind of an electronic tag, Shepherd et al. do not specifically disclose the types of electronic tag.

Tamada et al. disclose an electronic tag (RFID card 1). The tag comprises a metal, a CPU, memory, a circuit card, and an antenna communicating in a radio wave. The ID card may be used as a transponder for controlling access and locating of a bearer of the card or an object with the ID card. Since it is used as an ID card, each one of the card includes a unique identification information. The ID card does not contain a power source, but receives operating power from an interrogating signal of a tag reader. The reader includes means for processing the encrypted signal from the ID card, which corresponds to the interrogating signal. The reader also includes a sensor to detect the position of a bearer as he/she gets closer to the sensor. At a specific distance, the sensor is capable of detecting the presence of the ID card and exchanges data with the ID card. The memory in the ID card is a read-only memory. However, the reference is not limiting to a specific type of a memory. A programmable memory is ideal for a situation where a certain type of data needs to be updated frequently.

Art Unit: 2876

In view of Tamada's teaching, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ an ID card (transponder) capable of communicating in a radio wave to the electronic tag of Shepherd et al. due to the fact that more circulation data of a banknote can be stored on a medium for the purposes of maintaining specific data about the banknote and its circulation to prevent potential counterfeit and loss by a robbery during transportation.

6. Claims 72-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al. (US 6,402,025) in view of Haycock (US 6,065,072).

The teachings of Shepherd et al. have been discussed above. Shepherd et al. disclose a plurality of ATMs in the reference, but do not expressly disclose about an ATM network.

Haycock discloses an ATM connected in a network environment to exchange data about contents and characteristics of media cassettes loaded into the ATM. The network obviously provides a real time currency circulation information by reading information stored in the smart card 110. Therefore, the network is capable of determining the amount of currency in the network at any time by simply reading the smart card information.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have connected all the ATMs in a network environment as taught by Haycock for the purpose of being able to retrieve information related to a currency and its circulation path and amount of currency in the ATM network in a simpler and error free manner.

Allowable Subject Matter

Art Unit: 2876

7. Claims 88 and 91 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the cited prior arts do not disclose, teach, or fairly suggest utilizing an Eddy current type distance sensor or a target comprising Ferrite.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Black (US 6,786,354) discloses a media cassette including display means for displaying an indication of the contents within the cassette; Graef et al. (US 5,141,127) discloses a canister having plurality of buttons reflecting electrical conditions of switches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2876

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven S. Paik
Primary Examiner
Art Unit 2876

ssp